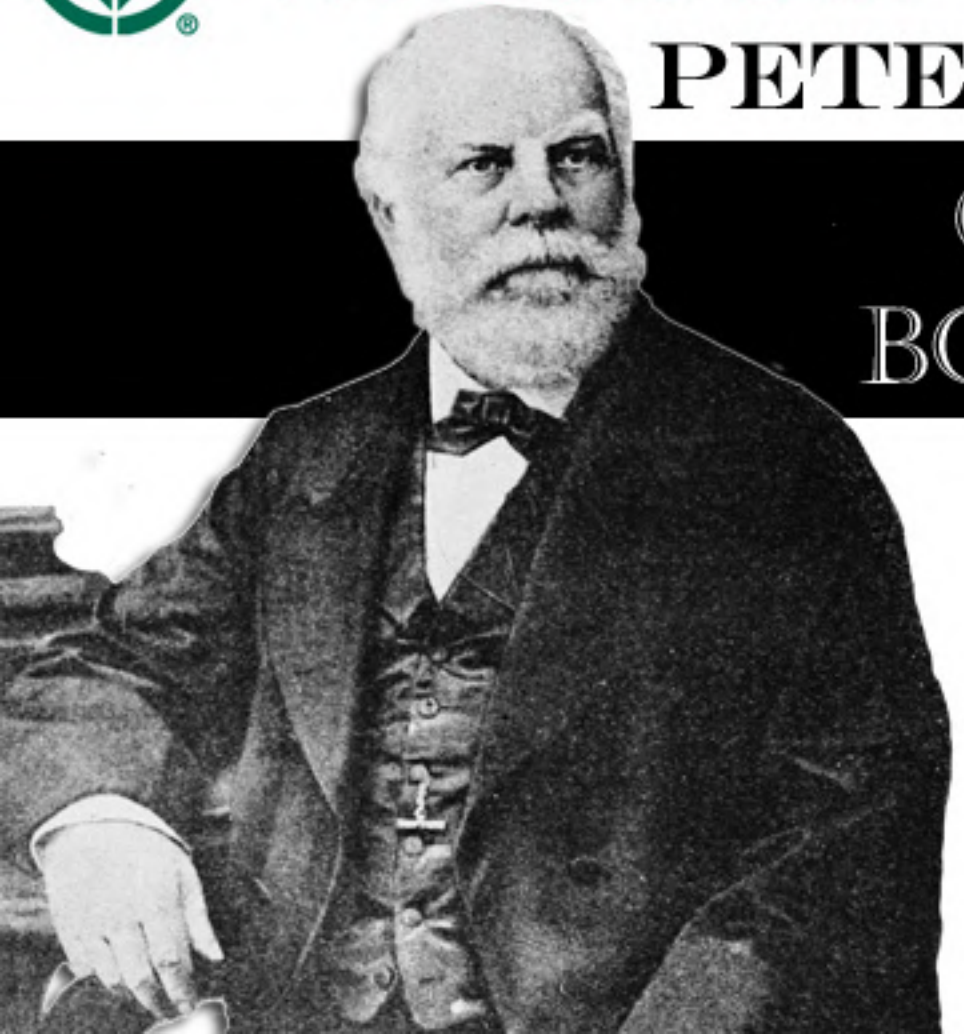
Missouri Botanical Garden

Peter H. Raven Library

George Engelmann Botanical Notebooks



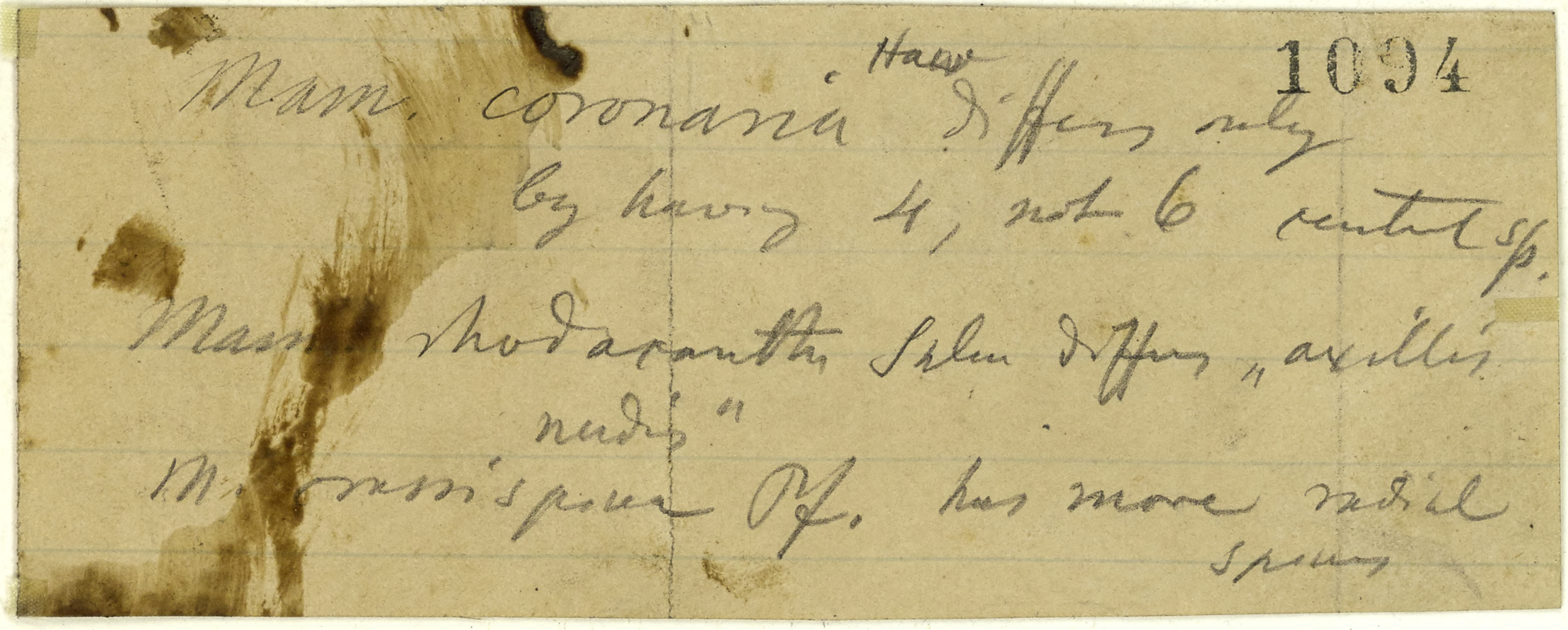
Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Mam. simplex. Cart. Mauritius
Cartagena, Isle de Lin. Sp.

1093

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS


1094

Mam. coronaria Haw Diffus only
by hairy 4, not 6 central sp.

Mam. rhodacantha Schw Diffus, axillis
nudis"

M. runcinata Pf. has more radical
spines

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Mam. Benecker has the largest seeds of any Mamill.

Obscurely - Linn XIX. 341

even of any Cactus (with the exception of Opuntia) !

Gtl. pg. 347

Seeds $\frac{1}{10}$ inch thick

1095

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

ENNO SANDER,

APOTHECARY,

CORNER OF SECOND AND WALNUT STREETS,

UNDER BARNUM'S HOTEL,

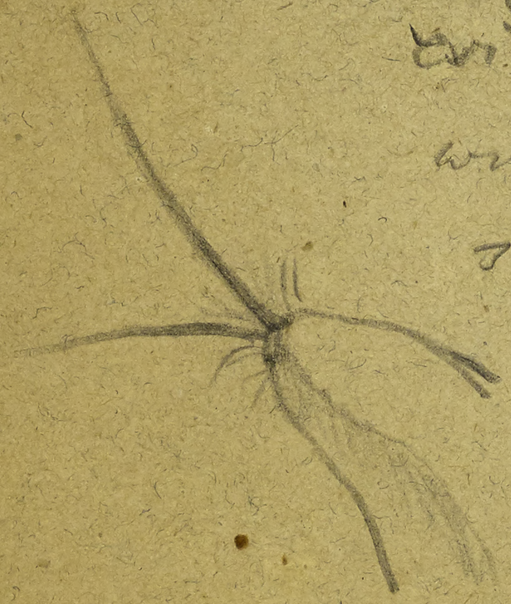
ST. LOUIS, MO.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Hort Leitz, Prag July 1869

Manulana acutangula Leitz, said to come
from Arizona or Dacotah



evidently a maximum Cactaceous species
with red petals large flowers and velvety
stigmata 4-5, and red anthers.
evidently one of the Mentabilis group
and nothing else

1096

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Mammillaria longimamma (Fide Purpus et Strobel) - mamma little over 1 in. smooth slightly grooved at base, 7 slender radial spines - white, about 1/8 - 1 2/8 in. long, one central spine. Flower about 1 2/8 in. long, petals sulphur yellow, three times as long as stamens. Pistil over 1 in. long, 7 stigmas. yellow style deeply imbedded

25/6/76 M

Mam. longimammica.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Mam: longimanum Desv. typica – in Mexico 1834 M.V.
is similar to my M. splendens, larger, flowers
larger, over 2 inches long, 5-6 stigmata

Fort Bent Mexico July 13 1864

Plant resinous – longer tubercles 12‴ long 4‴ in
diameter, with areola 1/3 li diameter, obtuse, with
oblique or tip, & radial & 1 central spine of equal
length and thickness – 10 or 12 l. long; flowers
flower 2 inches by (and wide?); ovary oval,
tube constricted above ovary;
Sepals about 13 oblong linear, obtuse, herbaceous
mucronate, towards the upper end finely ciliolate.
Petals 13, linear – spatulate, acute;
Tube inside naked for 3‴ staminate part
also nearly 3 lin long.
Anthers very small less than half a line long,
Pollen globose smooth, 0.035 li diameter
style ~~with~~ 15 l. long, violet; 6 stigmata
(catalons – erect) pale yellow, 3 l. long,
much longer than stamens, shorter than petals;
Ovules on single branched funicules
scarcely longer than they themselves.

N.B. Spines much longer than in the figures and
descriptions,

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

1097

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

ft 2‴

M-Conjugatarum July 13 '64

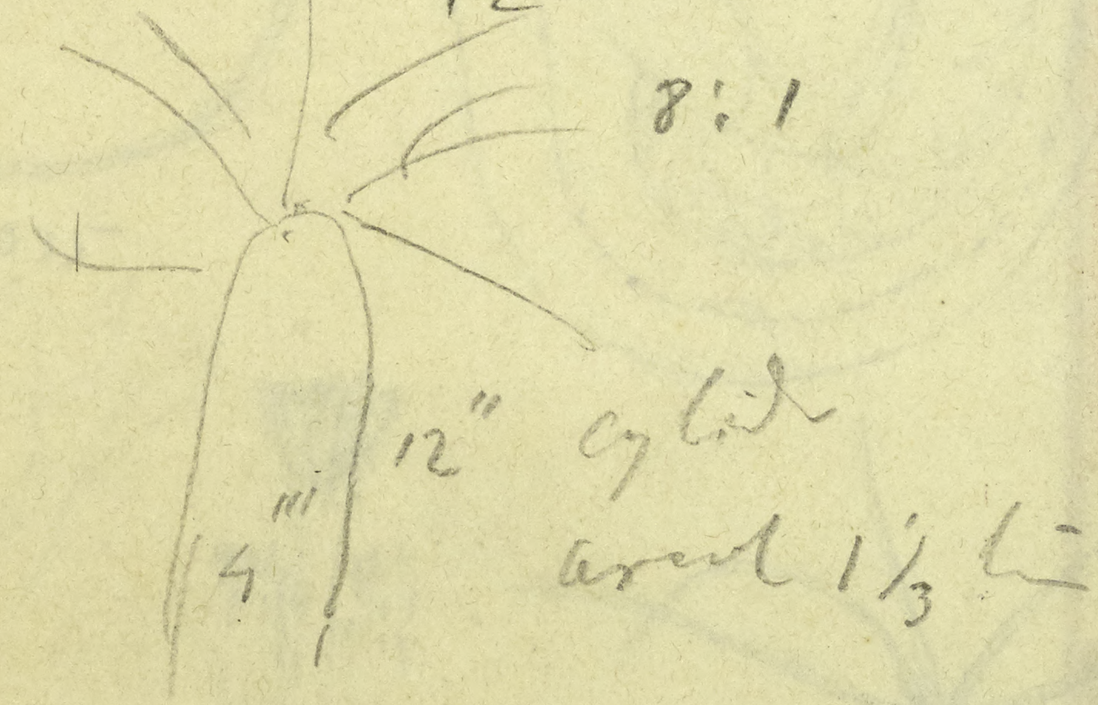
tube free 3‴ stamt 2½-

Stam 5‴

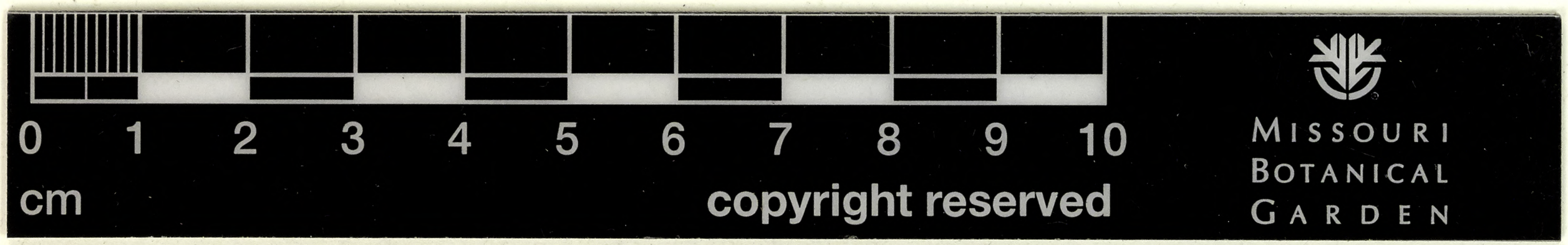
styl 15‴; intl 6 3‴ stig - mush lg ft ste, shot ft 2 pair

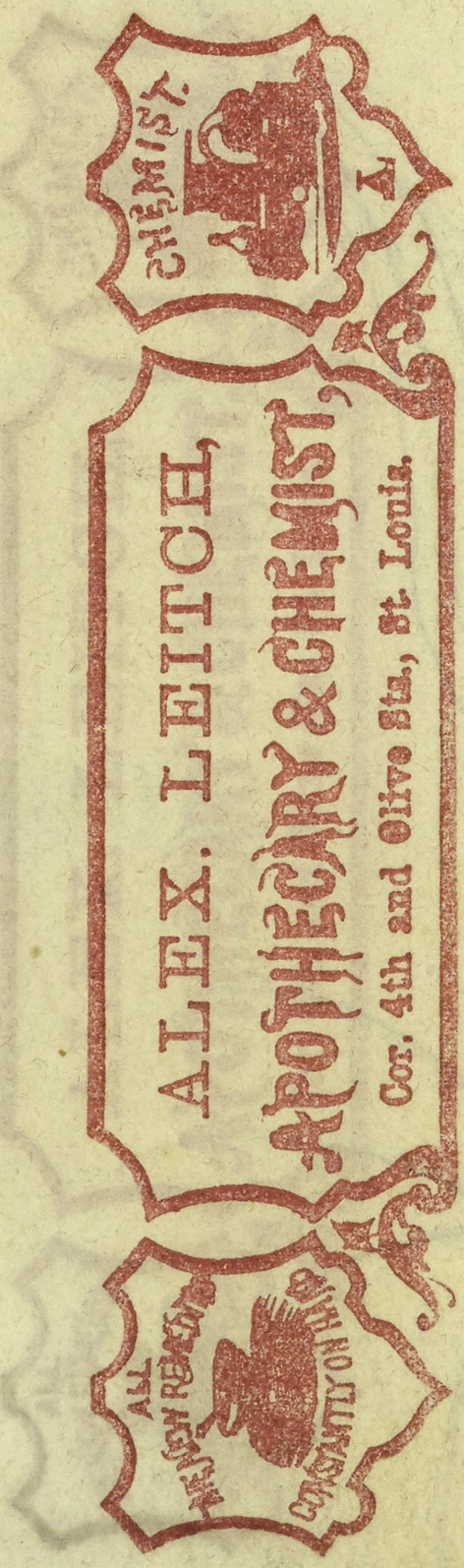
alfoal 1.613 oblg lin obs femin - intact hab[itat] unascertain-

pet-13



1098





MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Mamillaria magnimamma

Gorcki's Garden June 17 1864

Lastes erect, simple

base of flowers with very sparse or scarcely any wool

leave linear acute ~~sepals~~ entire

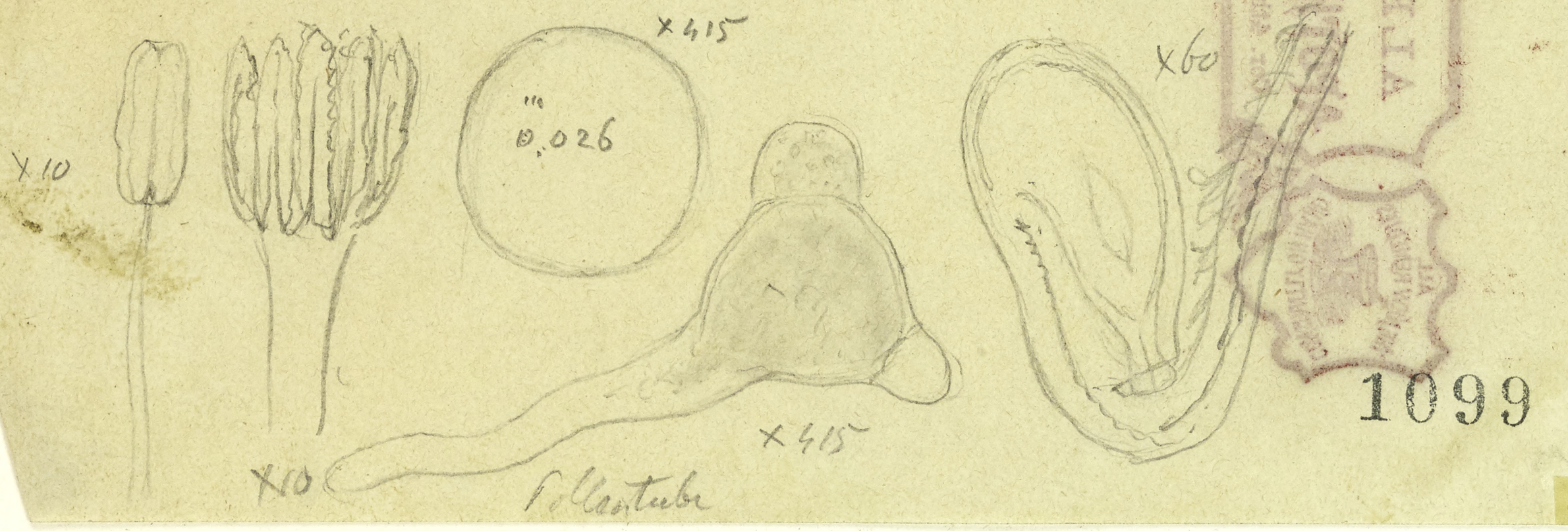
— — — petals —

naked span of tube 1½ lin long

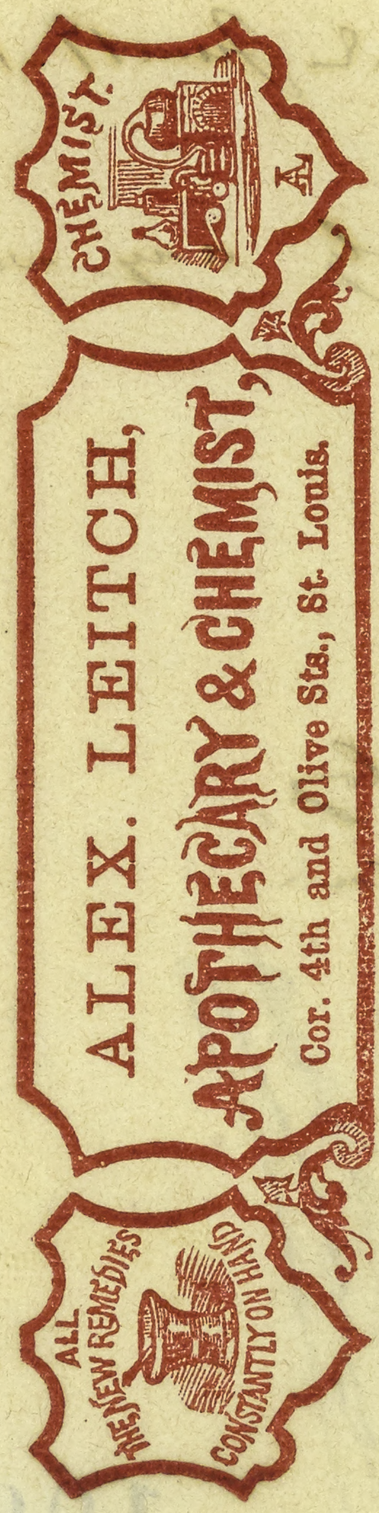
staminate part also 1½ lin long.

stam short, anthers (oblong) (linear) lin long,

stigmata 7–9 1 line long, erect, pale yellow



HOTEL FELTON
1099
0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN



MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

June 1860

mam. polyhdrie

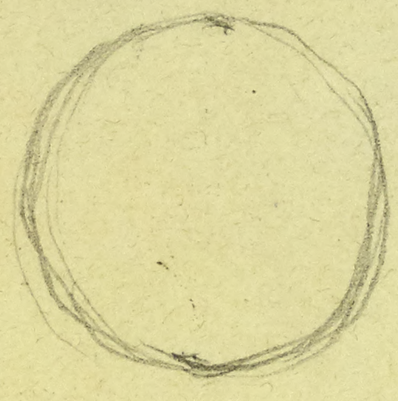
-5

staminata 4 rosea erecta capitula

stylus basi incrassata corporta

stigma ½ li long

X 412



Ovarium $\frac{9\frac{1}{2}}{412}$ Cm

$\frac{8}{412} - \frac{9}{4R}$

usual size

1100

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

AMERICAN POTHECARY.
ENGELMANN & LEMCH,
PHARMACEUTISTS,
Marble Building, Cor. Fourth & Olive Sts., St. Louis, Mo.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Main polythele

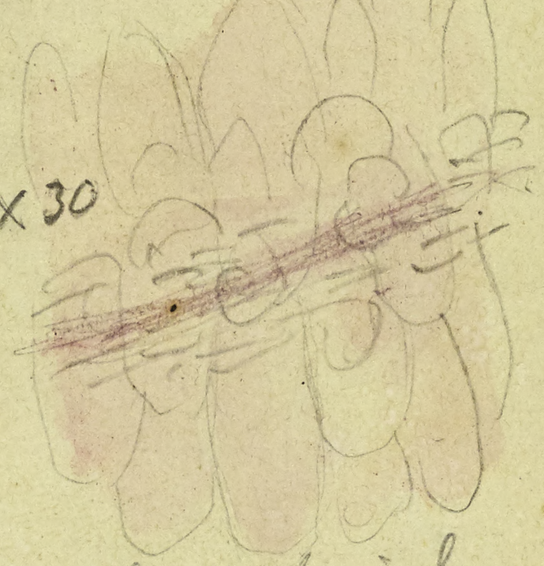
May 1862

Hooker

x 10.

very few seeds

x 30



cells of funicles

1101

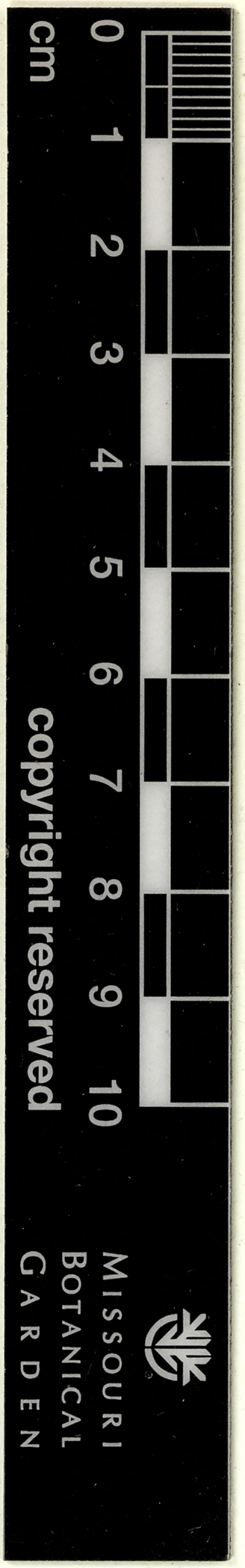
0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

M. W. ALEXANDER,

SOUTH-EAST CORNER OF FOURTH AND MARKET STREETS,

ST. LOUIS.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



Mammillaria polyedra

Gabel's garden Jun 17 1864

Lactescent — very poliferous.

flowers from an areola covered with dense long yellow wool and longer white bristles

16–18 lanc — linear acuminate ~~acute~~ ciliate sepals

about 8 — — — entire petals reddish

naked space of tube 2 lines long,

staminate part, only 1 line long.

stamens short, anthers oval ½ line long pollen about 0.024"

stigmata short, yellow, erect. 7, ½ line long style exsert over stamens

bristles and wool of areola ×60

×10

×415

after?

Pollen

0.021"

×60

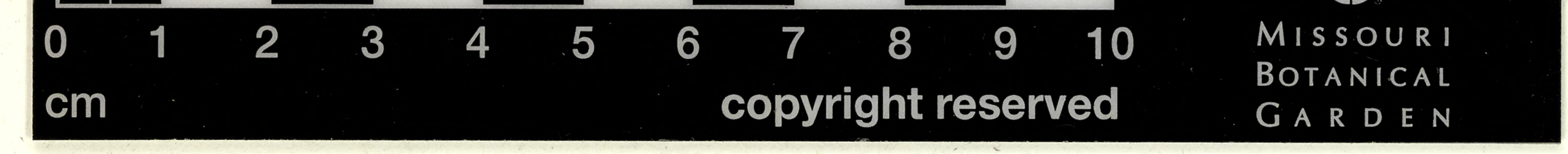
1102

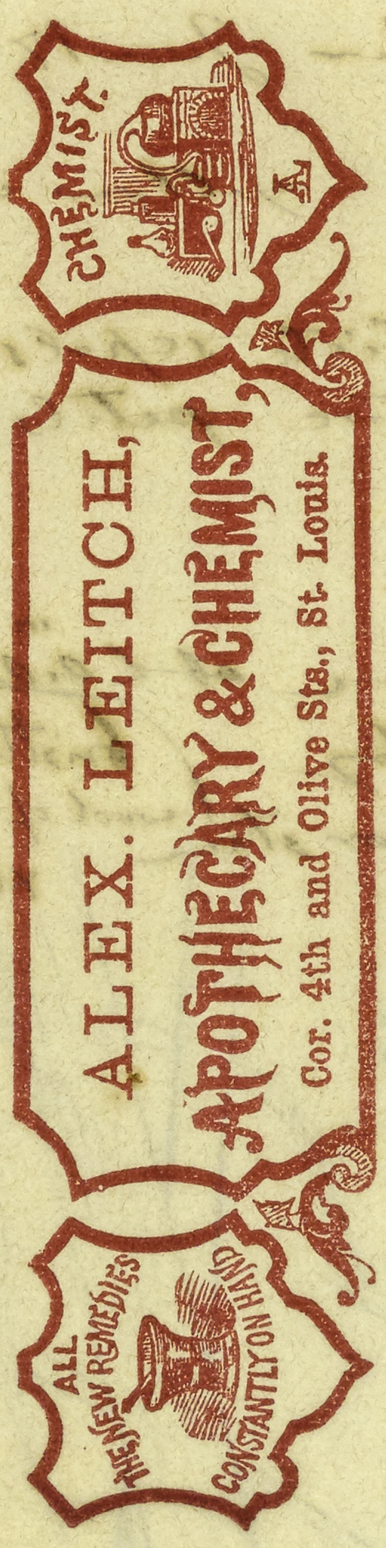
×10

0.024"

0.024"

funiculus a little longer the ovule





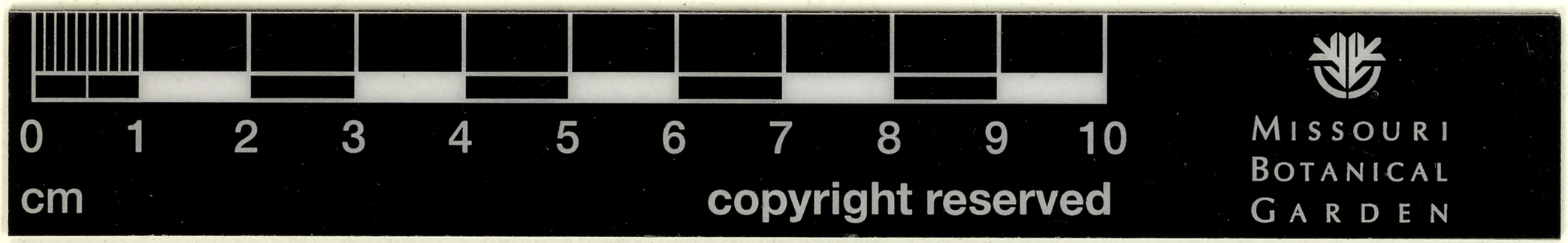
MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Mam. multiceps radicals-tuberules with short
wool beg hairy twisted spines + the caudly
interior spins with stout brownish (subsecut
8 ‴ 5-8 off one stouter central one extern spins
about 30, + several sterile, inner very
slender, shorter, extern ones longer, hairlike
twisted & curled. Compare description of seed.
— I do not see, how this plant can be
distinguished from *M. pusilla*.

1103

M. sphacelata Hort Paris (ex Coll Salm)
10-11 radial stiff spines rather equal, whitish
grey ones with dark tips; central spines 1 or 2
or sometimes more, as long or shorter than
the others



MISSOURI BOTANICAL GARDEN
copyright reserved
cm 0 1 2 3 4 5 6 7 8 9 10

Mr Lee St Louis Upon the 11th Here on
Board Str Davenport to be
Delivered to Mr Dalzell at
Dampers for Dr C C Parry Mo
Pac R.R.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Mr. Lesh, Iowa City, 10-12 pp. Asters
Giving us one note for Asters
Leslie on photograph

Notes made in Dyck
Jan. 1857

M. Manglesii Willdrana is the small one with yellow hooks — often cultivated at Stevens.

M. microthele has tubercles, hybridic — 1 series of radial spines and 2 stout but short central ones. —

M. variegata is a still smaller species, but my M. micromeris is certainly the smallest of all.

1104

M. orcobrissa seems similar to M. crassispina M. crassitesta probably the same. M. multiceps and M. pusilla seem the same.

M. xephyranthoides very much like my Wightii; globose; tubercles ovate, elongate dark green, bases broader; axills naked; 12–15 stamens whitish mid spines; 1 or often 2 central hooked brown spines. — figure of Salm has large whitish fl. externally rose & green; 7-9 greenish yellow stigm. — which plant: fl. 1½" inch long.

M. Schelhasii similar to Grahamii, but no double central spine and 2 or 3 downward hooked

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

upper straight ones. —

M. Schelhasii var rosea is almost like M. crinita and the latter can scarcely be distinguished from M. glochidiata. —

M. spharulata is different from any of my plants. —

M. cephalophora Salm 1850 = Mammillaria

Mamm. Haria see Pfeiff. p. 40

is no doubt my Mam. compacta 1848.

M. heteromorpha Scheer 1850 in Salm.

is according to the specimen (dry)

my M. macromeris.

M. milanocentra (Lemke) seems a form allied to applanata, with a long black central spine; rad. sp. 8 or 12, upp. short, lower long — angular Mammillae

is ours (of with Centr. spines)

M. minima & elongata seem to be the same, as M. uncinata differs only by its colour.

Mam. senilis has flowered in Münster with Mr Schäffer

K. latens, nearly 2 inches in diameter, scarlet, 8 days open, day and night!! (Jacobi.)

M. gracilis and the similar M. elongata also with very small, numerous fragile proliferations. (Jacobi)

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Notes – Coll Dyck Jan. 1857

notes – Coll Dyck Jan 1857

A dead specimen – Prince Salm Coll. without name – Label; supposed by the Prince to be

M. Schelhasii var tricuspidata but bud hairy

has 30–40 outer white bristly spines; a second radial series of 12 to 15 stouter stiffer shorter spines, brown tipped, of which the lower (? or upper?) are shorter while those of the outer series are more equal, each about 4–5, i.e. 2½–3½ times long; 1–3 central brown stout spines, hooked longer than the others, hooks all turned to the same side (upwards? or downwards?) tubercles teeth, fruit, shrivelled,

1105

seems to be allied to my *Gabata* entirely distinct from Schelhasii on next page

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Notes. Coll Dyck Lam 1857

M. sphaerotricha Morr; spines hairlike, bristly white, in many series almost pulvinate; exterior ones 60–70, more slender, hairy 2-3 l. long; interior ones pectinate & all directed upwards, short, 1–2 l. long, 10–15

β. robusta; has radial spines 50–60 in long 3–6 lin long, central ones 15–20. 2–3 lin long arrangement of the spines being the same from near M. lasiacantha

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

M. Schelhasii var. setosa. Areolæ tuberculate exterior spines 6–8 lin long, very fine, hairlike flexuous, about 30; 4 shorter interior ones of which the central is 5–6 lin long, hooked eight brown, the others shorter & straight all slender spines pubescent also the tubercles base of the exterior spines

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

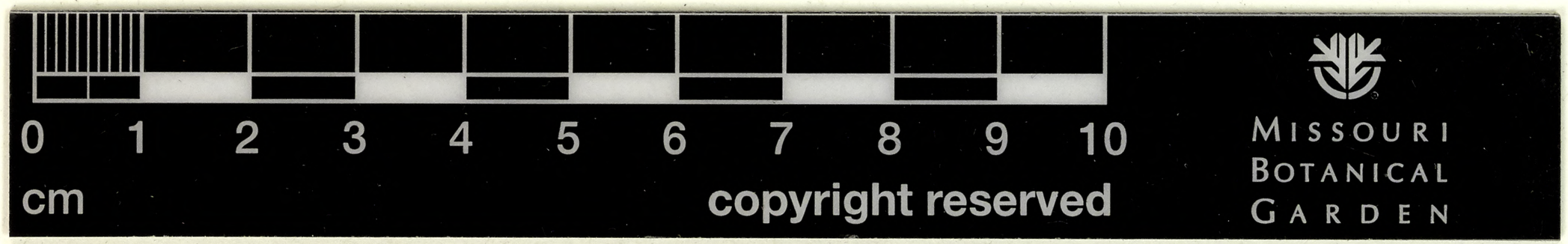
Notes de Dr Boelger's, Berlin March 1857

1106

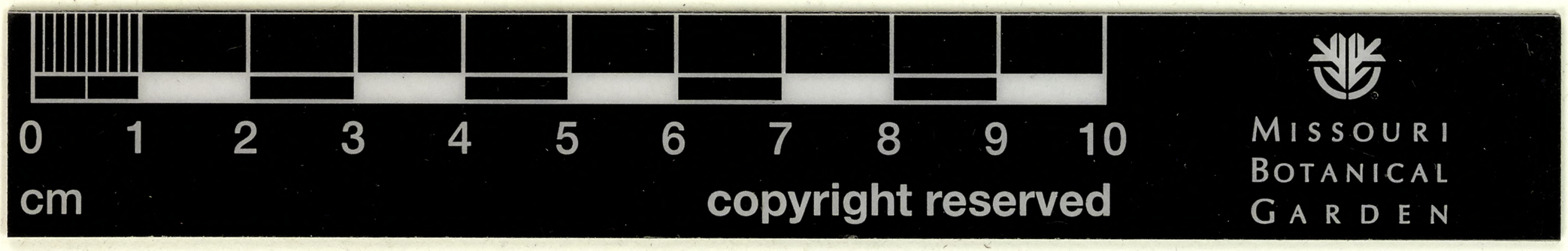
Mamm. Cirrhosa Bs. non montana

non applanata, **Lactiflucus**! — large twisted spires, angular, 4–6 — upper ones, short, lower ones 1/2 2 inches long. — ax. illae woolly.

In the cultivated plant I found 4–7 short radical spires 2 l. long; — & 3–4 central (radicating ones, or) divaricate, a little slender & longer, & straight! ____ not to be recognized for the same plant!



MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



Notes in Coll Dyck Jan 1857

Mam mirothele

has teretc tubercles 2-3 lines long!

25-30 subl spines in one series 3/4 - 1 1/4 lin long,

2 divaricate stouter central spines 1/2 lin long,

not allied to any Ch. mirowenii.

1107

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

S B Davenport March 31 1865

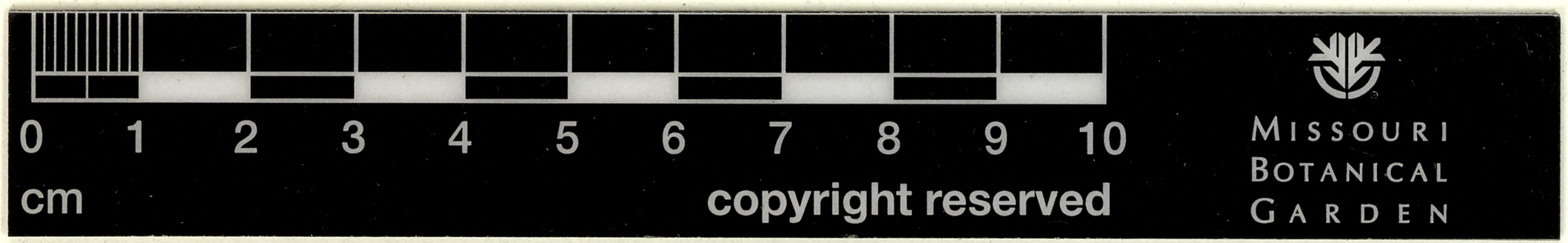
0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Notes made at Boulogne March 1857

1108

Mam. Macis nulanocarpa Boulger is the largest form of a series of which M. applanata is the smallest; M. crinacea Bs. is the next largest Guernsey ones very near, and then the others. — M. pachytele Bs. has as large spines as M. melanocarpa, but much larger tubercles (at base 5 — 6 lines wide) — the only 8 or 9 large red sp. drawn!

red sp.



MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

(Echis) Man. antourina Pugg (a Coppyste
San Antonio de Tula, mexico ined. ab Schwarte

ovatus (1/2" × 2") subacuti, basi cordati, tenuissime
pubescentes, margine subintegri (13/21)" & spinulosis
distantibus, costis externis 13–15 albidis
glabris, superioribus basi (4–5") approximatis
parallelis, longissimis (5–6"), — interioribus 6–7

Marmillan: 95 seeds of 1859 — pd

in Aloes since July 4th 1865 to Aug 20th

1/4 central moist spikes — many short slender bristles around — occasionally wanting!

watery juice

deep purple-red flowers small — with 18-21 rounded petals — 3-4 short obtuse petaloes flat stigmata.

1109

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

JONES & BLEICH,
DRUGGISTS
COR. FIFTH & MARKET STREETS,
ST. LOUIS, MO.

J. McKittrick & Co. Cor. Main & Vine.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN